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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 3

Complete if Known	
Application Number	10/692304
Filing Date	10-23-2003
First Named Inventor	Clement Hiel
Art Unit	~~2833~~ 1774
Examiner Name	~~Not yet assigned~~ G Roy
Attorney Docket Number	CTC001-3

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 2002/0189845-A1	12/19/2002	Gorrell	
		US- 3973385	08/10/1976	Roe	
		US- 6528729-B1	03/04/2003	Kamata	
		US- 5122622	06/16/1992	Reuss	
		US- 4763981	08/16/1988	Wilkins	
		US- 4059951	11/29/1977	Roe	
		US- 6568072-B2	05/27/2003	Wilemon	
		US- 3717720	02/20/1973	Snellman	
		US- 6180232-B1	01/30/2001	McCullough	
		US- 5222173	06/22/1993	Bausch	
		US- 3808078	04/30/1974	Snellman	
		US- Re. 32374	03/17/1987	Dey	
		US- 5561729	10/01/1996	Parris	
		US- 4961990	10/09/1990	Yamada	
		US- 6245425-B1	06/12/2001	McCullough	
		US- 6270856-B1	08/07/2001	Hendewerk	
		US- 5296456	03/22/1994	Shiga	
		US- 5917977	06/29/1999	Barrett	
		US- 6423808-B1	07/23/2002	Watanabe	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
		EP0346499B1	05/31/1995	Hagino		
		EP1124235A2	08-16-2001	Goldsworthy		
		EP1168374A2	01/02/2002	Goldsworthy		
		JP1126388A	09/28/1999	Ogata Akimasa		
		WO03/050825A1	06/19/2003	Blucher		

Examiner Signature		Date Considered	6/05

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Sheet 2 of 3

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First Named Inventor	Clement Hiel
Art Unit	~~2833~~ 1774
Examiner Name	~~Not yet assigned~~ GRAY
Attorney Docket Number	CTC001-3

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		US- 6447927-B1	09/10/2002	McCullough	
		US- 6463198-B1	10/08/2002	Coleman	
		US- 5651081	07/22/1997	Blew	
		US- 5847324	12/08/1998	Farquhar	
		US- 6344270	02/05/2002	McCullough	
		US- 5198621	03/30/1993	Kojima	
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Sheet 3 of 3

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Filing Date	10-23-2003
First Named Inventor	Clement Hiel
Art Unit	~~2833~~ 1774
Examiner Name	~~unknown~~ GRAY
Attorney Docket Number	CTC001-3

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		SUCUMA P. ELLIOT, "HECO puts new composite conductors to the test", Transmission and Distribution World, Jun 1, 2003	
		Office of Industrial Technologies, "Development of a Composite-Reinforced Aluminum Conductor", Dec, 2001	
		Oak Ridge National Laboratory, "Power Grid of the Future", ONRL Review, Vol. 35, No. 2, 2002, web-print	
		Alcoa Conductor Products Company, "T&D Conductors; Overhead; Underground; Building Wire", July 1, 1989, pg. 33	

Examiner Signature		Date Considered	6/1/05

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